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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,968	07/03/2003	Herve Burgaud	06028.0020-00	3634

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EXAMINER	
ELHILO, EISA B	

ART UNIT	PAPER NUMBER
1751	

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/611,968	BURGAUD ET AL.	
	Examiner	Art Unit	
	Eisa B. Elhilo	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 9-36* is/are rejected.

7)☒ Claim(s) *7 and 8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/3/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claims 1-36 are pending in this application.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 6, 9 and 13-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoeffkes et al. (US 2002/0059682 A1).

Hoeffkes et al. (US' 682 A1) teaches a hair dyeing composition comprising primary alcohol ethanol as an aldehyde precursor as claimed in claims 1, 6 and 9 (see page 11, paragraph, 0211), at least one enzyme of alcohol oxidase (see page 7, paragraph, 0129), at least one heteroaromatic hydrazone (see page 2, paragraph, 0018), oxidation base of para-phenylenediamine in the amount of 0.2% as claimed in claims 13-14 (see page 2, paragraph, 0019 and page 14, paragraph, Example 10), oxidation coupler of resorcinol in the amount of 0.07% as claimed in claims 15-16 (see paragraph, 14, Example 10), direct dyes (substantive dyes) as claimed in claim 17 (see page 7, paragraph, 0127) and other oxidizing agent as claimed in claim 18 (see page 7, paragraph, 0129). Hoeffkes et al. (US' 682 A1) also teaches a method for dyeing hair comprising applying to the hair the dyeing composition as described above and after mixing the dyeing composition with the oxidizing composition (enzyme composition), the mixture is applied to the hair and left for 30 minutes and then rinsed out as claimed in claims 19-

35). Hoeffkes et al. (US' 682 A1) teaches all the limitations of the instant claims. Hence, Hoeffkes, anticipates the claims.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-5, 10 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoeffkes et al. (US 2002/0059682 A1).

Hoeffkes et al. (US' 682 A1) teaches a dyeing composition comprising primary alcohol ethanol as an aldehyde precursor as claimed in claims 1, 6 and 9 (see page 11, paragraph, 0211), 0.001 to 1% of at least one enzyme such as alcohol oxidase (see page 1, paragraph, 0014 and page 7, paragraph, 0129), at least one heteroaromatic hydrazone (see page 2, paragraph, 0018).

The claims differ from the reference by optimizing the amount of the aldehyde precursors in the dyeing composition. The claims also recite specific plant species as the sources of the enzymes.

However, the reference teaches that the amounts of the dyeing ingredients are known to the person skilled in the art (see page 11, paragraph, 0234). It is further taught by the reference that the enzymes are obtained from the Stachybotrys species (see page 1, paragraph, 0012).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate such a dyeing composition by optimizing the dyeing ingredients such as aldehyde precursors in order to get the maximum effective amount of these

ingredients in the dyeing composition and would expect that alcohol oxidases as aldehyde generators would have similar properties in the dyeing composition no matter from which source these enzymes are derived, and would expect such a composition would have similar properties to those clamed, in the absence of contrary.

With respect to claim 36, it would have been obvious to one having ordinary skill in the art at the time the invention was made to separate the dyeing ingredients by utilizing a multi-compartment device because the reference clearly teaches that the enzyme preparation is mixed to the dyeing precursors (dyeing composition) directly prior to dyeing hair (see page 11, paragraph, 0235), which implies that the enzyme composition is kept separately from the dyeing composition, and, thus, a person of the ordinary skill in the art would utilize such a device in order to separate the dyeing composition from the enzymatic composition (oxidizing composition), and would expect such a composition to have similar properties to those claimed, absent unexpected results.

3 Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoeffkes et al. (US 2002/0059682 A1) in view of Rudolf Benshein (US 3,634,013).

The disclosure of Hoeffkes et al. (US' 682 A1) as described above, does not teach the claimed formula of the heteroaromatic hydrazone.

However, the reference clearly teaches a dyeing composition comprising hetercyclic hydrazone (see page 2, paragraph, 0018).

Rudolf Benshein (US' 013) teaches in analogous art of hair dyeing formulation, a composition comprising a heterocyclic hydrazone compound having a formula similar to the claimed formula as claimed in claim 11 (see col. 2, the upper formulae) and wherein the amount

of the heterocyclic hydrazone is 0.5 to 7% which within the claimed range as claimed in claim 12 (see col. 7, line 14).

Therefore, in view of teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the dyeing composition of Hoeffkes et al. (US' 682 A1) by incorporating the heterocyclic hydrazone compound as taught by Rudolf Benshein (US' 013) to make such a composition. Such a modification would be obvious to one having ordinary skill in the art because the primary reference of Hoeffkes et al. (US' 682 A1) suggests the use of heterocyclic hydrazone in the hair dyeing composition (see page 2, paragraph, 0018). Rudolf Benshein (US' 013) as a secondary reference clearly teaches claimed formula of heterocyclic hydrazone compound and thus, a person of the ordinary skill in the art would be motivated to incorporate the claimed hydrazone as taught by Rudolf Benshein (US' 013) in the dyeing composition of Hoeffkes et al. (US' 682 A1) with a reasonable expectation of success for improving the dyeing properties of the composition and would expect such a composition to have similar properties to those claimed, absent unexpected result.

Allowable Subject Matter

4 Claims 7 and 8 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record do not teach or disclose a hair dyeing formulation comprising aldehyde precursors chosen the claimed amino acid species as claimed.

Conclusion

The references listed on from 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B. Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -5:30) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eisa Elhilo
Patent Examiner
Art Unit 1751

July 15, 2005